

REMARKS

1. The Patent Office Action of March 2, 2005 is hereby acknowledged. The shortened statutory period of three (3) months time period for response to the Office Action expires on June 2, 2005. This amendment is being mailed by United States Express Mail, Express Mail Label No. EV 593948589 US in a postage paid envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 29, 2005. The time for response to the Office Action of March 5, 2005 expired on June 2, 2005. Concurrently with the filing of this amendment, the Applicant has requested a one month extension of time and has paid the required fee. Accordingly, the deadline to now file a responsive amendment is July 2, 2005. Therefore, this amendment is timely filed. In the event that the Commissioner for Patents should determine that any additional fee is required for this Amendment to be timely filed and an appropriate fee is due for that extension of time, then the Commissioner for Patents is hereby authorized to charge Deposit Account Number 18-2222 for such appropriate fee.

2. The original '101 Application had twenty-two (22) total claims wherein one (1) was an independent claim. The application still currently has twenty-two (22) claims of invention with only one independent claim. Accordingly, no additional filing fee is due. In the event that the Commissioner for Patents should determine that any additional fee is due, then the Commissioner for Patents is hereby authorized to charge Deposit Account Number 18-2222 for the appropriate fee.

3. In the Office Action of March 2, 2005, Patent Examiner Jenkins rejected Claims 1 through 18 but did not discuss Claims 19 through 22. In a telephone conversation between Examiner Jenkins and Applicant's attorney Thomas I. Rozsa on Sunday, June 26, 2005, Examiner Jenkins agreed that Claims 19 through 22 were still in the case and the failure to talk about them in the Office Action was simply an oversight. Accordingly, all

1 twenty-two claims of invention are still presently in the case.

2 4. Through this amendment the Applicant has amended Claim 1 to add to claim  
3 element (c) the wording so that it now reads:

4 "c. consolidating said framed-mixture to form a solid framed-billet that is about  
5 100% of theoretical density;"

6 The Applicant has also amended Claim element (d) to read:

7 "d. rolling said framed-billet to said framed-metal-matrix-composite-sheet to  
8 form a plate/sheet without edge cracks."

9  
10 5. The Patent Examiner's very detailed analysis of the patent application is  
11 acknowledged with appreciation. Referring to Paragraph 2 of the Office Action, the  
12 Examiner states "In considering patentability of the claims under 35 U.S.C. 103(a), the  
13 examiner presumes that the subject matter of the various claims was commonly owned at the  
14 time any inventions covered therein were made absent any evidence to the contrary.  
15 Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and  
16 invention dates of each claim that was not commonly owned at the time a later invention was  
17 made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential  
18 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a)." In responding to this, the  
19 Applicant states that the subject matter of all the claims was commonly owned at the time all  
20 of the inventions covered therein were made.

21  
22 6. The Applicant has very carefully studied the Examiner's rejection of all  
23 claims of invention under 35 U.S.C. § 103(a) as being unpatentable over United States Patent  
24 5,006,289 issued to Yamamoto et al. (hereafter "Yamamoto Patent"). The Applicant has  
25 very carefully studied what the Examiner has said with respect to what he believes the  
26 Yamamoto Patent discloses. Based on what the Examiner has said, the Applicant has made  
27 the amendments to Claim 1 as discussed above. With these amendments, it is believed that  
28 Claim 1 now clearly claims the invention and is patentable over the Yamamoto Patent. The

1 reasons are as follows:  
2

3 6.01 The Yamamoto Patent involves the use of a tube or shell to allow the  
4 forming of hard to process powders. The powder with the stub/shell is elongated while the  
5 powder is still a powder. The process of burning/sintering the powder into a sintered article  
6 is done after the deformation process is completed.

7 6.02 The process disclosed in the '101 Application is first to consolidate the  
8 framed/boxed aluminum-ceramic powder mixture at an elevated temperature to form a  
9 framed/boxed billet that is about 100% of theoretical density. The framed/boxed billet that is  
10 a solid, not a powder, is then rolled into sheet plate sheet. The frame/box billet that is a  
11 solid, not powder, is then rolled into plate/sheet.

12 6.03 The process described by the Yamamoto Patent cannot apply to produce  
13 aluminum-ceramic plate/sheet. If the process is used to produce the aluminum-ceramic  
14 plate/sheet described in the '101 Application, the resulting plate/sheet product would contain  
15 gas porosity trapped within the product. In aluminum powder metallurgy processing,  
16 aluminum powder or aluminum-ceramic matrix composite powders can be cold compacted  
17 by cold isostatic pressure and then vacuum sintered. The density of the compacted powder  
18 must be kept below approximately 92 percent of theoretical so that the chemi-absorbed and  
19 physi-absorbed water that is associated with the aluminum oxide layer that is present on all  
20 aluminum can be removed during the sinter operation. The 92 percent density limit assures  
21 interconnected porosity throughout the compacted powder.

22 6.04 Therefore, based upon this, it is clear that the process disclosed in the  
23 present invention is fundamentally different from that disclosed in the Yamamoto Patent.  
24  
25  
26  
27  
28

7. Therefore, it is respectfully submitted that the present '101 Application is now in condition for allowance and issuance of a Notice of Allowance of the '101 Application is respectfully solicited.

Date: June 29, 2005

Respectfully submitted,

Thomas I. Rozsa  
Thomas I. Rozsa  
Registration No. 29,210

**ROZSA LAW GROUP LC**  
**Customer No. 021907**  
15910 Ventura Boulevard  
Suite 1601  
Encino, California 91436-2815  
Telephone (818) 783-0990  
Facsimile (818) 783-0992

I hereby certify that this correspondence  
is being deposited with the United States  
Postal Service as Express Mail in an envelope  
addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450

June 29, 2005  
Date of Deposit  
Express Mail No. EVS93948589

**THOMAS I. ROZSA**  
**Registration No. 29,210**  
Thomas I. Rozsa June 29, 2005  
Signature and Date

MATRIX.AMN.001